

What is claimed is:

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1 1. An ink jet recording material comprising:
2 a support; and
3 at least one recording layer provided on said support;
4 wherein at least one of said at least one recording
5 layer contains colloidal particles and a water-soluble resin.

1 2. An ink jet recording material according to claim 1,
2 wherein at least an uppermost layer of said at least one
3 recording layer contains a dispersion of primary colloidal
4 particles and a water-soluble resin incorporated; and
5 at least one of peaks on a pore distribution curve of
6 said uppermost layer lies in a pore diameter in the range of 2
7 nm to 100 nm.

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1 3. ^{The} ~~An~~ ink jet recording material according to claim 1
2 ~~or 2~~, wherein said colloidal particles are colloidal silica.

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1 4. An ink jet recording material according to claim 2,
2 wherein said support has an recording layer having a plurality
3 of layers, at least an uppermost layer and a second layer of
4 said plurality of layers containing colloidal silica; and
5 at least one of peaks on a pore diameter distribution
6 curve of said uppermost layer and said second layer lies in a
7 pore diameter in the range of 2 nm to 100 nm.

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5. ~~An ink jet recording material according to claim 2,
wherein said layer containing the dispersion of primary
colloidal particles contains an adhesive; and
a weight ratio of the colloidal silica to the adhesive
by solid content is in the range of 4/1 to 50/1.~~

6. ~~An ink jet recording material according to claim 2,
wherein the peak on the pore diameter distribution curve of
said uppermost layer substantially lies in the pore diameter
only in the range of 2 nm to 100 nm.~~

7. ~~The~~ ^{the} ~~An~~ ink jet recording material according to claim 1
~~or 2~~, further comprising a sticking or adhesive interlayer on
said support;

^a ~~wherein the~~ laminate of said support, said interlayer
and said recording layer are obtained by a process which
comprises forming said interlayer on said support, superposing
said interlayer on a recording layer formed on a forming
material, and then peeling said forming material off said
recording layer.

8. ~~The~~ ^{the} ~~An~~ ink jet recording material according to claim 7,
wherein said recording layer contains at least one of an
amorphous silica or colloidal silica.

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9. ^{The}~~An~~ ink jet recording material according to claim 7,
wherein said interlayer contains at least one selected from the
group consisting of thermoplastic resin, adhesive and pressure-
sensitive adhesive.

10. ^{The}~~An~~ ink jet recording material according to claim
1 ~~or 7~~, wherein said recording layer comprises a lower layer
which is close to said support and an upper layer which is far
from said support;

said upper layer contains a pigment in an amount of not
less than 80% by weight based on a solid content of said upper
layer; and

said pigment contains colloidal particles having an
average particle diameter of not more than 200 nm in a
proportion of not less than 85% by weight of the pigment.

11. ^{The}~~An~~ ink jet recording material according to claim
10, wherein an average particle diameter of the pigment in said
lower layer is greater than that of the pigment in said upper
layer; and

the pigment in said lower layer contains colloidal
particles having an average particle diameter of not more than
500 nm.

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12. ^{The}~~An~~ ink jet recording material according to claim
1 ~~or 7~~, wherein said support has a plurality of recording
layers containing colloidal silica and an adhesive.

13. ^{The}~~An~~ ink jet recording material according to claim
12, wherein an average particle diameter of the colloidal
silica in said uppermost layer containing colloidal silica and
an adhesive is in the range of 10 nm to 300 nm; and
an average particle diameter of the colloidal silica in
the layers lower than said uppermost layer containing colloidal
silica and an adhesive is greater than that of colloidal silica
in said uppermost layer.

14. ^{The}~~An~~ ink jet recording material according to claim
12, wherein the colloidal silica in at least one of said layers
containing colloidal silica and an adhesive is a cationic
colloidal silica.

15. ^{The}~~An~~ ink jet recording material according to claim
1, wherein at least one of the layers constituting said
recording layer contains colloidal silica and at least one
polyvinyl alcohol selected from the group consisting of
polyvinyl alcohol having a saponification degree of not less
than 95% and a polymerization degree of not more than 1,100 and
a silicon-containing modified polyvinyl alcohol having a
polymerization degree of not more than 1,100.

10 peeling said forming material from said recording
11 layer.

1 20. A process for producing an ink jet recording
2 material according to claim 19, wherein at least one of said at
3 least one layer of said recording layer containing colloidal
4 particles and a water-soluble resin.

1 21. A process for producing an ink jet recording
2 material according to claim 19 or 20, wherein said recording
3 layer has at least a lower layer which is close to interlayer
4 and an upper layer which is far from interlayer;
5 said upper layer contains a pigment in an amount of not
6 less than 80% by weight based on the solid content of said
7 upper layer; and

8 said pigment contains colloidal particles having an
9 average particle diameter of not more than 200 nm in a
10 proportion of not less than 85% by weight of the pigment.

1 22. A process for producing an ink jet recording
2 material according to claim 19, wherein said recording layer
3 includes a plurality of layers containing colloidal silica and
4 adhesive.

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